

Appl. No. 10/723,441
Supplemental Amendment

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A magnetic pickup for a stringed musical instrument, where the instrument includes strings suspended between a string support structure that includes a sound board, comprising:

a primary coil rigidly fixed to the sound board of the musical instrument
~~magnetically coupled to a string of the musical instrument and fixedly attached to a string support structure;~~

at least one magnet rigidly fixed to the primary coil that generates a static magnetic field along at least one pole piece encased within the primary coil;

a secondary coil located spaced apart from the primary coil and suspended to move relative to the primary coil;
~~magnetically coupled to the primary coil, the secondary coil further coupled to the primary coil by a flexible suspension mechanism~~

wherein the primary coil is configured to generate a string signal; and

wherein the secondary coil is configured to generate a body signal.

2. (Original) The pickup of claim 1, wherein the primary coil and the secondary coil are electrically coupled in a noise-cancellation circuit.

3. (Original) The pickup of claim 2, wherein the primary coil further comprises a primary coil winding wound in the same direction as a secondary coil winding in the secondary coil.

4. (Currently Amended) The pickup of claim 1, further comprising ~~wherein:~~
~~the string support structure includes a soundboard;~~
~~and the primary coil is fixedly attached to the soundboard~~
a clamping mechanism attached to the primary coil that enables the primary coil to be removably attached to the sound board.

Appl. No. 10/723,441
Supplemental Amendment

5. (Currently Amended) The pickup of claim ~~[[4]]~~1, wherein:
the soundboard includes a soundhole and the pickup is mounted in the soundhole;
~~with the primary coil is positioned between the secondary coil and the~~
~~string extending into the musical instrument string support structure.~~

6. (Currently Amended) The pickup of claim 1, wherein the ~~soundboard string~~
~~support structure~~ includes a recess and the primary coil is fixedly mounted to a surface of the
~~soundboard string support structure~~ with the secondary coil extending into the recess.

7. (Original) The pickup of claim 1, wherein the secondary coil has a resonant
frequency in the range from 100 Hz to 500 Hz.

8. (Original) The pickup of claim 1, wherein the flexible suspension mechanism has
spring constant in the range from 1×10^4 N/m to 1×10^6 N/m.

9. (Original) The pickup of claim 8, wherein the secondary coil has a mass in the
range from 15 grams to 25 grams.

10. - 23. (Cancelled)

24. (New) A magnetic pickup for a stringed musical instrument, where the instrument
includes strings suspended between a string support structure that includes a sound board,
comprising:

- a primary coil rigidly fixed to the sound board;
- at least one magnet rigidly fixed to the primary coil that generates a static
magnetic field along at least one pole piece encased within the primary coil;
- a secondary coil suspended below the primary coil via a suspension mechanism;
- wherein the suspension mechanism suppresses relative movement of the
secondary coil with respect to the primary coil, when the sound board is oscillating in the ring
mode.

Appl. No. 10/723,441
Supplemental Amendment

25. (New) The magnetic pickup of claim 24, wherein:
the suspension mechanism is a pillar;
the centerline of the primary coil defines a Z axis;
the primary coil is elongated in a direction that defines an X axis, which intersects the Z axis and is perpendicular to the Z axis;
the pillar is attached to the primary coil at a point that is centered with respect to the X axis; and
the pillar is attached to the secondary coil at a point that is centered with respect to the X axis.
26. (New) The magnetic pickup of claim 25, wherein:
a Y axis is defined in a direction that is perpendicular to the X axis and the Z axis;
the pillar is attached to the primary coil at a point on the Y axis offset from the intersection of the X axis and the Z axis; and
the pillar is attached to the secondary coil at a point similarly offset along the Y axis.
27. (New) The magnetic pickup of claim 24, wherein the secondary coil has a resonant frequency in the range from 100 Hz to 500 Hz.
28. (New) The magnetic pickup of claim 24, wherein the suspension mechanism has spring constant in the range from 1×10^4 N/m to 1×10^6 N/m.
29. (New) The magnetic pickup of claim 24, wherein the secondary coil has a mass in the range from 15 grams to 25 grams.
30. (New) The magnetic pickup of claim 24, wherein the suspension mechanism is a pillar constructed from ABS plastic.